First Named Inventor: Kenneth J. Kirchhoff Application No.: 09/665,821

27. A method of repositioning an adjustable keyboard tray in a lateral direction substantially perpendicular to a center mount bracketing mechanism that is secured to a horizontal surface at one end and the adjustable keyboard tray at an opposite end, the method comprising:

pulling the adjustable keyboard out from under the horizontal surface, causing the bracketing mechanism to translate out from under the horizontal surface, wherein the adjustable keyboard tray has a top and a bottom plate that are bonded together;

loosening a screw that passes through a through hole in the top plate and is retained in a threaded bore formed in the bottom plate, so that the screw does not prevent lateral movement of the adjustable keyboard tray;

repositioning the adjustable keyboard tray in the lateral direction until the adjustable keyboard tray is in a desired position; and

movement of the adjustable keyboard tray.

REMARKS

This is in response to the Office Action mailed on May 10, 2002, in which claims 2, 3, 6-10, 12-14 and 17 were rejected, claims 4, 5, 15 and 16 were objected to, and claims 19-27 were allowed.

Claim Rejections - 35 U.S.C. § 112

Claim 17 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner pointed out that claim 17 depends from canceled claim 11. With this Amendment, claim 17 has been amended to depend from claim 14 (as the Examiner assumed for purposes of examination). The rejection of claim 17 under 35 U.S.C. § 112 should accordingly be withdrawn.

First Named Inventor: Kenneth J. Kirchhoff
Application No.: 09/665,821

Claims Rejections - 35 U.S.C. § 103

Claims 2, 6, 12-14 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smeenge et al. (USP 4,616,798) in view of Martin (USP 5,732,910), and claims 3, 6 and 7-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bateson (USP 6,123,304) in view of Martin.

A. Claims 2, 6, 12-14 and 17

Independent claim 2 recites an adjustable keyboard tray for use with a center mount bracketing mechanism that is secured to and translates in and out from a horizontal surface. The tray includes a top plate made of polymeric material and a bottom plate made of polymeric material that is secured to the top plate by ultrasonic welding. A mounting plate secures the tray to the bracketing mechanism, the mounting plate being secured to the bottom plate of the tray in a recessed mounting area to maintain a substantially smooth outer surface along the bottom plate.

The Examiner rejected claim 2 by combining the teachings of Smeenge et al. and Martin. Smeenge et al. disclose a keyboard tray that is center-mounted, and which includes a plastic material molded around a central core (45) to define an upper planar surface (46). Smeenge also disclose a support plate (50) fixedly molded in the underside of the tray. See FIG. 2. The Examiner noted that Smeenge et al. fail to disclose that the tray is formed from two separate elements, namely a top and bottom plate that is welded together.

The Examiner supplied this deficiency in Smeenge et al. by turning to the disclosure of Martin. Martin teaches a <u>lap-supported</u> keyboard support apparatus which includes a top member (21), a medial member (22) and a lower member (23). The top member (21) has a bottom channel (31), and the medial member has a top channel (32), which mate together to form a cavity (33) therebetween. A drawer (36) is receivable into the cavity (33). See FIG. 3.

In order to reject a claim under 35 U.S.C. § 103 as being obvious, all of the claim limitations must be taught or suggested by the prior art. See M.P.E.P. 2143.03, citing In re Royka, 180 U.S.P.Q. 580 (C.C.P.A. 1964). Thus, all of the features of claim 2 must be taught or suggested by Smeenge et al. or Martin in order to properly reject that claim. The Examiner's proposed

Application No.: 09/665,821

First Named Inventor: Kenneth J. Kirchhoff

-9-

combination of these references would substitute the keyboard tray of Martin for the keyboard tray of Smeenge et al. This combination would not disclose all of the recited elements of claim 2. Claim 2 recites a top plate and a bottom plate that is secured to the top plate by ultrasonic welding. Martin does not disclose the connection of a top plate and bottom plate by ultrasonic welding. The Examiner has identified the foam lower member (23) as corresponding to the claimed bottom plate. However, the lower member (23) is not a plate, and is not connected to the top member (21) at all (and thus is not connected by ultrasonic welding). Claim 2 also recites a mounting plate that secures the tray to a bracketing mechanism, wherein the mounting plate is secured to the bottom plate of the tray in a recessed mounting area. There is no recessed mounting area in the Martin apparatus to secure a mounting plate, since the bottom surface of the foam lower member (23) is flat. Therefore, since the combination of Smeenge et al. and Martin does not disclose all of the recited elements of claim 2, the rejection of claim 2 under 35 U.S.C. § 103(a) should be withdrawn.

Furthermore, in order to combine multiple prior art references as the basis of an obviousness rejection, there must be some suggestion or motivation, either in the references themselves or elsewhere in the art, to combine the teachings of the references. See M.P.E.P. 2143. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. M.P.E.P 2143.01, citing In re Gordon, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The keyboard support apparatus of Martin is designed to be placed on the lap of a user. This means that there is no need for the light weight and stability (competing constraints) that motivated the Applicants to invent the claimed apparatus. The lack of this motivation is apparent in the Martin apparatus, which employs a thick foam member (23) to provide cushioning as the apparatus is placed on the user's lap. Significant changes would have to be made to the Martin apparatus for it to be suitable for center mounting and support from a horizontal work surface, as recited in claim 2 and disclosed by Smeenge et al. Such changes are not taught or suggested by Smeenge et al., Martin, or elsewhere in the art. The combination of Smeenge et al. and Martin is therefore not a proper one, since there

First Named Inventor: Kenneth J. Kirchhoff Application No.: 09/665,821

-10-

is no suggestion or motivation to do so, and the rejection of claim 2 under 35 U.S.C. § 103 on that basis should accordingly be withdrawn.

Claim 6 depends from either claim 2 or claim 3. For the purpose of its dependency from claim 2, claim 6 is allowable with it parent claim 2. In addition, it is respectfully submitted that the combination of features recited in claim 6 is patentable on its own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing <u>In re Fine</u>, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

Independent claim 13 recites an adjustable keyboard tray for use with a bracketing mechanism that is secured to and translates in and out from a horizontal surface. The tray includes a top tray and a bottom tray secured to the top tray, along with other features. As with independent claim 2, independent claim 13 recites a mounting plate that secures the tray to the bracketing mechanism, wherein the mounting plate is secured to the bottom plate of the adjustable keyboard tray in a recessed mounting area. As was discussed above with respect to claim 2, the combination of Smeenge et al. and Martin does not disclose a top plate connected to a bottom plate, and does not disclose securing the mounting plate to the bottom plate of the tray in a recessed mounting area. Moreover, as discussed above with respect to claim 2, it is improper to combine those references because of the lack of suggestion or motivation to do so. The rejection of claim 13 under 35 U.S.C. § 103(a) should accordingly be withdrawn.

Independent claim 14 recites an adjustable keyboard tray for use with a bracketing mechanism that is secured to and translates in and out from a horizontal surface. The tray includes a top tray and a bottom tray secured to the top tray, along with other features. Independent claim 14 also recites a mounting plate that secures the tray to the bracketing mechanism, wherein the mounting plate is secured to the tray by a retaining bracket. As was discussed above with respect to claim 2, the combination of Smeenge et al. and Martin does not disclose a top plate connected to a bottom plate. Moreover, as discussed above with respect to claim 2, it is improper to combine

First Named Inventor: Kenneth J. Kirchhoff Application No.: 09/665,821

-11-

those references because of the lack of suggestion or motivation to do so. The rejection of claim 14 under 35 U.S.C. § 103(a) should accordingly be withdrawn.

Claim 12 depends from either claim 13 or claim 14, and is allowable with these parent claims. In addition, it is respectfully submitted that the combination of features recited in claim 12 is patentable on its own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

Claim 17, as amended, depends from claim 14, and is allowable therewith. In addition, it is respectfully submitted that the combination of features recited in claim 17 is patentable on its own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

B. Claims 3, 6 and 7-10

Independent claim 3 recites an adjustable keyboard tray for use with a center mount bracketing mechanism that is secured to and translates in and out from a horizontal surface. The tray includes a top tray and a bottom tray secured to the top tray by ultrasonic welding. A mounting plate secures the tray to the bracketing mechanism, wherein the mounting plate is secured to the tray by a retaining bracket.

The Examiner rejected claim 3 by combining the teachings of Bateson and Martin. Bateson discloses a shelf (18) and keyboard supporting surface (20) which sits on a support shelf (12). The support shelf (12) slides toward and away from a work surface, and the keyboard shelf (18) is pivotally coupled to the support shelf (12), such as by a pivotal ball-bearing. See FIG. 1. The Examiner noted that Bateson does not disclose that the tray is formed of top and bottom plates. The Examiner supplied this deficiency in Bateson by turning to the disclosure of Martin, the disclosure of which has been discussed above with respect to claim 2.

In order to reject a claim under 35 U.S.C. § 103 as being obvious, all of the claim limitations must be taught or suggested by the prior art. See M.P.E.P. 2143.03, citing In re Royka,

First Named Inventor: Kenneth J. Kirchhoff
Application No.: 09/665,821

180 U.S.P.Q. 580 (C.C.P.A. 1964). Thus, all of the features of claim 3 must be taught or suggested by Bateson or Martin in order to properly reject that claim. The Examiner's proposed combination of these references would substitute the keyboard tray of Martin for the keyboard tray of Bateson. This combination would not disclose all of the recited elements of claim 3. Claim 3 recites a top plate and a bottom plate that is secured to the top plate by ultrasonic welding. Martin does not disclose the connection of a top plate and bottom plate by ultrasonic welding. The Examiner has identified the foam lower member (23) as corresponding to the claimed bottom plate. However, the lower member (23) is not a plate, and is not connected to the top member (21) at all (and thus is not connected by ultrasonic welding). Claim 3 also recites that the mounting plate secures the tray to the bracketing mechanism (which is secured to and translates in and out from the horizontal work surface). The mounting plate identified by the Examiner in Bateson is the support shelf (12), which does not secure the keyboard tray to a center mount bracketing mechanism as claimed, but instead is received into side rails (14). Therefore, since the combination of Bateson and Martin does not disclose all of the recited elements of claim 3, the rejection of claim 3 under 35 U.S.C. § 103(a) should be withdrawn.

Furthermore, in order to combine multiple prior art references as the basis of an obviousness rejection, there must be some suggestion or motivation, either in the references themselves or elsewhere in the art, to combine the teachings of the references. See M.P.E.P. 2143. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. M.P.E.P 2143.01, citing In re Gordon, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The keyboard support apparatus of Martin is designed to be placed on the lap of a user. This means that there is no need for the light weight and stability (competing constraints) that motivated the Applicants to invent the claimed apparatus. The lack of this motivation is apparent in the Martin apparatus, which employs a thick foam member (23) to provide cushioning as the apparatus is placed on the user's lap. Significant changes would have to be made to the Martin apparatus for it to be suitable for center mounting and support from a horizontal work surface, as recited in claim 3. Such changes are not

First Named Inventor: Kenneth J. Kirchhoff

Application No.: 09/665,821

taught or suggested by Bateson, Martin, or elsewhere in the art. The combination of Bateson and Martin is therefore not a proper one, since there is no suggestion or motivation to do so, and the rejection of claim 3 under 35 U.S.C. § 103 on that basis should accordingly be withdrawn.

Claim 6 depends from either claim 2 or claim 3. For the purpose of its dependency from claim 3, claim 6 is allowable with it parent claim 3. In addition, it is respectfully submitted that the combination of features recited in claim 6 is patentable on its own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

Claims 7-10 depend from claim 6, and are allowable therewith. In addition, it is respectfully submitted that the combinations of features recited in claims 7-10 are patentable on their own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

Objections to Claims

Claims 4, 5, 15 and 16 were objected to as being dependent on rejected base claims, but were otherwise indicated to be allowable. In view of the foregoing, the base claims from which claims 4, 5, 15 and 16 depend are now in condition for allowance, and claims 4, 5, 15 and 16 are allowable therewith.

Allowed Claims

The allowance of claims 19-27 is gratefully acknowledged.

Application No.: 09/665,821 First Named Inventor: Kenneth J. Kirchhoff

-14-

CONCLUSION

In view of the foregoing, all pending claims 2-10, 12-17 and 19-27 are now in condition for allowance. A Notice to that effect is respectfully requested.

Respectfully submitted,

KINNEY & LANGE, P.A.

Date: August 12, 2002

Alan M. Koenck, Reg. No. 43,724 THE KINNEY & LANGE BUILDING

312 South Third Street

Minneapolis, MN 55415-1002 Telephone: (612) 339-1863

Fax: (612) 339-6580

GWJ:AMK:dkm

NEW TOWN

First Named Inventor: Kenneth J. Kirchhoff

Application No.: 09/665,821

APPENDIX: MARKED UP VERSION OF SPECIFICATION AND CLAIM AMENDMENTS

17. (Amended) The adjustable keyboard tray of claim [11] 14, wherein the top plate is secured to the bottom plate by ultrasonic welding along a set of the inner walls.